



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/993,442	12/18/1997	EARLE W. JENNINGS III	939A-040310	5108

7590 02/03/2003

ROBERT C COLWELL
TOWNSEND AND TOWNSEND AND CREW
TWO EMBARCADERO CENTER 8TH FLOOR
SAN FRANCISCO, CA 94111

EXAMINER

NGO, CHUONG D

ART UNIT	PAPER NUMBER
----------	--------------

2124

DATE MAILED: 02/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/993,442

Applicant(s)

JENNINGS, EARLE W.

Examiner

Chuong D Ngo

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,10-20 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,10-20 and 23-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 30.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAIL OF ACTION

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 21-24 have been renumbered 23-26 respectively.

2. Claim 20 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 20 is directed to an array processor, thus fails to further limit the integrated circuit of claim 10.

3. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is indefinite as whether "a multiplier and accumulator unit", line 6, is one of the "plurality of multiplier/accumulator circuits" recited in claim 10, and if it is, it would be

misdescriptive to recite "the array processor of claim 10 further comprising ... a multiplier and accumulator unit...".

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1,3,10-18 and 23-26 are rejected under 35 U.S.C. 102(b) as being by Yamauchi et al. "Architecture and Implementation of a Highly Parallel Single-Chip Video DSP".

As per claims 1,3,10-18,15 and 26, Yamauchi et al. discloses in figure 2 an integrated circuit for image processing. The circuit has an interfacing circuit (PIO0-2) configured to control access to a memory (see page 209, col. 2, lines 15-26), an embedded processor (PROG.SEQ), and an array processor having a first through fourth MAC units (DPU0-3). Each MAC unit (DPUi) is coupled to a local memory (CMi) (see page 209, col. 2, lines 1-7), and a shared operand unit (IN1) for each pair of MAC units for simultaneously providing a shared operand to the MAC units of the respective pair as claimed.

As per claims 23 and 24, Yamauchi et al. also disclose in figure 6 an integrated circuit having multiprocessing systems as claimed.

6. Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi et al. "Architecture and Implementation of a Highly Parallel Single-Chip Video DSP".

It is noted that Yamauchi et al does not specifically disclose the integrated circuit using a simplified IEEE floating point notation in the computation. However, the use of a simplified IEEE floating point notation in the computation would have been obvious to a person of ordinary skill in the art for increasing the data range.

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong D. Ngo whose telephone number is (703) 305-9764. The examiner can normally be reached on Monday-Friday from 7:30 AM to 6:00 PM.

The fax phone number for the organization where this application or proceeding is assigned are as follows:

(703) 746-7238	(After Final Communication)
(703) 746-7239	(Official Communication)
(703) 746-7240	(For Status inquiries, draft communication)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Serial No. 08/993,442
Art Unit: 2124

5



01-29-03.

Chuong D. Ngo
Primary Examiner
Art Unit 2124